

SEP 5 1963

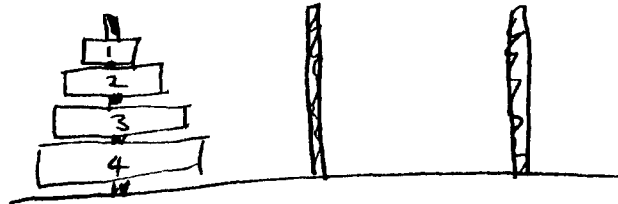
MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE 39, MASSACHUSETTS

September 4, 1963

Prof. Joshua Lederberg  
Department of Genetics  
Stanford Medical Center  
Palo Alto, California

Dear Josh:

I don't know a name for your series. But you could call it "Hanoi". For it is precisely the order in which pieces are moved to solve the pyramid puzzle,



called "Tower of Hanoi".

The solution, your series, is essentially unique, except for backtracking. I don't know anything about your generating process, which might be represented as

$$2^{H_n} - 1 = (n)_2 \text{ XOR } (n-1)_2$$

or  $H_n = \log[(R) \text{ XOR } (n-1) + 1]$

Sincerely,

*Marvin*  
Marvin Minsky

MM:cs

*2/22 is this  
Benzu  
problem?  
if Jengke*

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASSACHUSETTS, U. S. A.

M. Minsky  
Tech. Sq. - 817  
545 Main Street

*any further  
remembrance on  
the compact-vector  
problem?*

*M. MINSKY*